Target Isolation System, High Power Laser and Laser Peening Method and System Using Same

ABSTRACT

5 [0078] A system for applying a laser beam to work pieces, includes a laser system producing a high power output beam. Target delivery optics are arranged to deliver the output beam to a target work piece. A relay telescope having a telescope focal point is placed in the beam path between the laser system and the target delivery optics. The relay telescope relays an image between an image location near the output of the laser system and an image location near the target delivery optics. A baffle is placed at the telescope focal point between the target delivery optics and the laser system to block reflections from the target in the target delivery optics from returning to the laser system and causing damage.